Titan C.
The Nucleus of Trust

Titan C is the Google-designed security chip on Chromebooks*. It defends from the core to keep devices secure, protect user identity, and ensure system integrity.

Continuous security

Designed by Google

Google designs all Titan C chips, and monitors the manufacturing process to ensure quality. These chips are then shipped to factories to be built into a Chrome device.

Updated by Google

All firmware updates to these chips are pushed out by Google. When there's a known compromise, you can rest easy knowing Google will push out a fix to all Chromebooks rapidly as soon as a solution is known.

Standard on Chromebooks

Titan C chips are built into Chromebooks, available on devices across price points. They are always on and require no configuration to enable.

*All Chromebooks launched since January 2019 come with the Titan security chip except for the Lenovo 100e Chromebook 2nd Gen MTK and the Lenovo 300e Chromebook 2nd Gen MTK, which come with a different security chip.
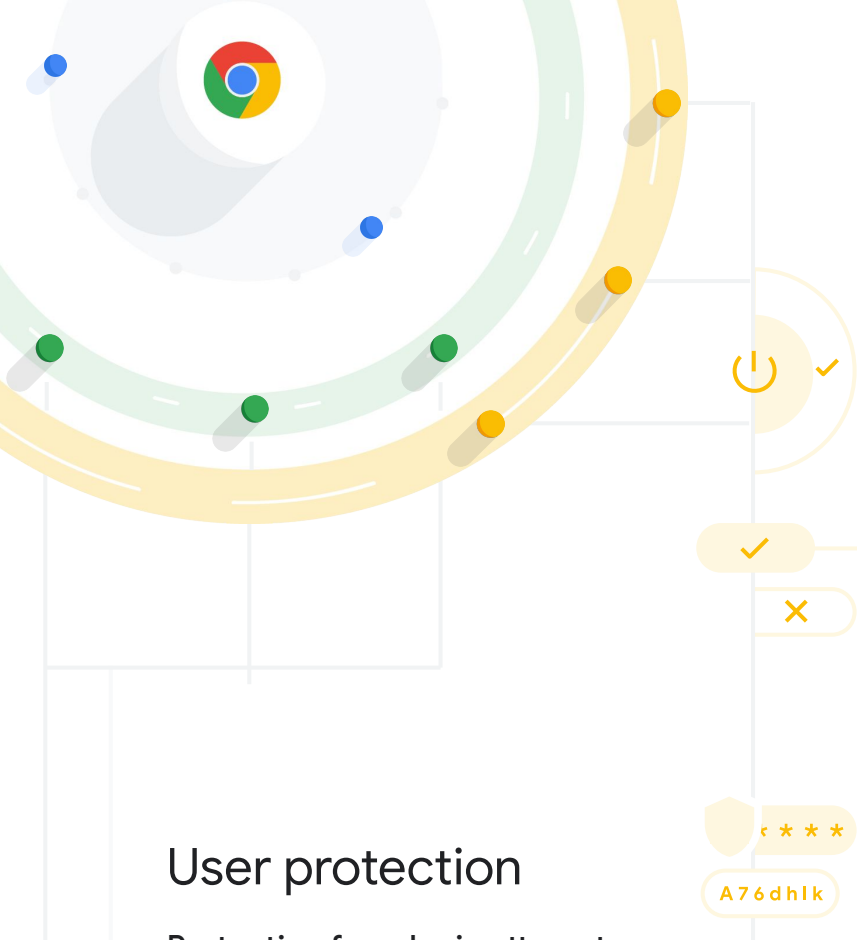
System integrity

Protection from malicious tampering of OS & firmware

Titan C assists with the Verified Boot process, which prevents malicious code from modifying Chrome OS.

Protection from enterprise policy non-compliance

Titan C helps ensure that many policies set with Chrome Enterprise, like the ability to prevent users from putting their device into developer mode, are enforced on managed Chromebooks.

Protection from access to applications from compromised devices

Titan C can be leveraged by a third party developer to ensure that the device being used to access the application and it's data hasn't been compromised, through a feature called Verified Access.

User protection

Protection from login attempts on remote hardware

Titan C guards access to user data encryption keys. Even if a hacker had your password and hard drive, they wouldn't be able to decrypt your data on a different device.

Protection from brute force password attempts

Titan C protects the device from brute force attacks so hackers can't try millions of combinations of passwords or pin codes to attempt to log into the device.

Protection from Phishing Attacks

Titan C enables authentication methods, like two-factor authentication with the power button, that would require a power button press in addition to the password to log into the device.

chrome enterprise

To learn more about security on Chromebooks, download our whitepaper